DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004645 Address: 333 Burma Road **Date Inspected:** 16-Nov-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Wen Peng, Um Bin **CWI Present:** Yes No **Inspected CWI report:** Yes No N/A **Rod Oven in Use:** Yes No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date, Caltrans Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing island, China for the purpose of observing and monitoring the fabrication of the SAS Superstructure.

Bay 7

Magnetic Particle Test

The Quality Assurance Inspector performed 10% random magnetic particle testing verification the following floor beam assemblies; FB015-023, FB012-013, FB011-013, and FB011-017. See Caltrans report TL-6028 Magnetic Particle Test Report, dated Nov. 16, 2008 for additional information.

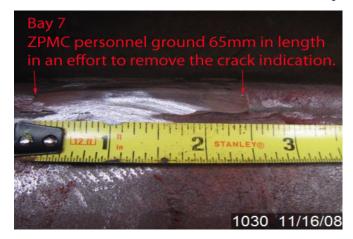
FB011-017

The Quality Assurance Inspector discovered a 2 to 3mm crack indication overlooked by ZPMC Quality Control Inspectors. The crack indication was discovered while the QA was a performing magnetic particle verification on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Um Bin about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Bin and ZPMC Quality Control Inspector Wen Peng agreed with the Quality Assurance Inspector that the crack indication was overlooked by ZPMC Quality Control Inspectors. The Quality Assurance Inspector observed ZPMC personnel have removed an area 8mm in depth and 65mm in length of filler metal by grinding in an effort to remove the indication discovered by the Quality Assurance Inspector is a surface indication. ZPMC Quality Control Inspector Wen Peng informed the Quality Assurance Inspector ZPMC

WELDING INSPECTION REPORT

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personnel performed magnetic particle testing on the ground area, revealing the crack indication is a sub surface indication. Mr. Peng informed the indication was not a crack indication and does not need to be a critical weld repair, than the Quality Assurance Inspector asked Mr. Peng if the indication was a not a crack than why would he agreed with Quality Assurance Inspector about the indication being a crack indication. The Quality Assurance Inspector than asked Mr. Peng why would be remove 8mm of weld metal by grinding if the indication was a crack. Mr. Peng admitted to the Quality Assurance Inspector he did not want to issue a critical weld repair because the floor beam needed to be green tagged on this date. Mr. Peng admitted to the Quality Assurance Inspector The indication was crack and he will issue a critical weld repair. See Caltrans report TL-15 for additional information.







Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Peter Dautermann 150 0219 9593, who represents the Office of Structural Materials for your project.

| Inspected By: | Lara,Raymond | Quality Assurance Inspector |
|----------------------|--------------|-----------------------------|
| Reviewed By: | Wright,Mark | QA Reviewer |